

Claims

- [c1] What is claimed is:
- 1.A light emitting diode (LED) light source comprising:
a printed circuit board (PCB) having a plurality of holes;
a heat sink connected under the PCB for conducting heat;
a plurality of heat conductors formed on the heat sink
corresponding to each hole of the PCB for conducting heat,
each heat conductor having a basin on the topside; and
at least one LED chip attached to the basin of the heat
conductor.
- [c2] 2.The light source of claim 1 further comprises a plurality of
conductive metal wires connected between an electrode of the
LED chip and an electrode of the PCB.
- [c3] 3.The light source of claim 1 wherein the material of the heat
sink is aluminum.
- [c4] 4.The light source of claim 3 wherein the material of the heat
conductor is aluminum formed from the aluminum heat sink.
- [c5] 5.The light source of claim 1 further comprises an adhesive for
fixing the LED chip.
- [c6] 6.The light source of claim 5 wherein the adhesive is epoxy or
silver epoxy.
- [c7] 7.The light source of claim 1 further comprises a housing for

reflecting light and helping transmit heat.

[c8] 8. The light source of claim 1 further comprises a lens for focusing the light from the LED chip.